

# Oadhafi sees similarity between

says his country's international role compares with the work of Jesus Christ. In an Italian television interview broadcast tonight, the 36-year-old head of state also said that Libyan women were inadequate "either biologically or morally" to do the same job as men. In an interview he was asked why his country's image was often associated with terrorism overseas. He replied: "When Jesus appeared he was quickly attacked... because he was a prophet that brought the new, the good...".

AMMAN, WEDNESDAY, APRIL 12, 1978 - JAMADI AWAL 3, 1398

An independent Arab political daily published by the Jordan Press Foundation

جوردن تايمز يومية سياسي تصدر بالأنجليزية عن المؤسسة الصحفية الاردنية «الراي»

## China urges Israeli withdrawal

HONG KONG, April 11 (R). — China today urged Israel to withdraw its troops from Lebenon immediately, totally and unconditionally, the New China News Agency reported. The official people's daily in a commentary charged that "the Israeli aggressors are trying to occupy large tracts of land in south Lebanon on a permanent basis." The paper said the Israeli authorities position concerning Lebanon was totally unjustified, according to the agency. The Israeli aggressors must withdraw from the southern part of Lebanon rapidly, completely and unconditionally."

Price : Jordan 50 fils ; Syria 50 plastres ; Lebanon 75 plastres ; Saudi Arabia 1 riyal; UAR 1 dirham; Great Britain 25 pence.

# Jordanian

AMMAN, April 11 (JT). — Jordanian envoys continued tour-ing Arab capitals for the third iay today delivering messages Arab heads of state from His Majesty King Hussein. The messages are related to Jord-messages are related to Jord-messages are related to Jord-messages are related to Jordtion plan and King Hussein's rall for an Arab summit.

orer Chaile

Volume 3, Number 726

in Abu Dhabi, President of " Tithe United Arab Emirates She-∹ 🗅 kh Zayed Ibn Sultan Al Nahayan received a message from Jordanian Court Minister Am-Ler Khammash who arrived yes-ः क्राह्मerday from Muscat

In Tunis, Minister of State for Foreign Affairs Hassan Ib-('() palmerahim delivered King Hussein's message to President Habib Bo-\_\_\_urguiba who welcomed His Ma-

guard

TURIN, Italy, April 11 (R), — Three gunmen today shot and

killed a guard at a prison whe-

re 15 Red Brigades urban guerrillas are being held here while on trial for subversion.

But one of the gunmen was

ter arrested at a medical clinic.

His capture could give police a breakthrough in their hunt

for the Red Brigades gang wh-

ich kidnapped former Italian

Premier Aldo Moro last month.

said it received a call purport-

ing to come from Signor Mo-

to's kidnappers today\_threate-

miess their demands were

The Red Brigades have not so far claimed responsibility for

gunning down the prison gua-

ning to kill him on Thursday

met.

ln Paris, French televiskor

wounded in the attack and la-

Red Brigades

shot

jesty's call for an Arab summit and expressed readiness to attend it.

Head of the Command Council of North Yemen Col. Ahmad Hussein Al Ghashmi received the King's message from Jordanian Interior Minister Sulaiman Arar, Mr. Arar said that Col. Al Ghashmi had agreed to take part in the summit. Mr. Arar will leave Sana'a tomorrow for Khartoum to deliver the Royal Message to President Nimeiri.

Last night Chief of the Royal Hashemite Court Sharif Abdul Hamid Sharaf returned from a three country tour delivering the King's message to the leaders of Saudi Arabia, Kuwait and Syria

dead

The murder did not stop the

trial of the 15 Red Brigades

members resuming this morn-

his family and not yet publish-

riere Della Sera reported, with-

out giving a source, that he

appealed again emotionally for

a prisoner exchange to obtain

The leading newspaper Cor-

bvert the state.

# pushes negotiate

Romanian President Nico-Ceausescu is expected to raise new ideas for Korean unification and a Middle East settlement when he meets President Carter this week.

Mr. Ceausescu, who has frequently served as a bridge in East-West relations, will confer with Mr. Carter at the White House tomorrow and on Thursday.

It will be President Ceausescu's fourth trip to the United States in eight years and he will be seeking renewed assurances of American support for Romania's independent course espite its membership in the Communist Warsaw Pact.

interest in statements by President Ceausescu that he has indications Communist North ing an armed gang to try to su-Korea might be willing to negotiate a federation with South In Rome, there was intense Korea preserving the existing social systems of both halves interest in a letter reported to have been sent by 61-year-old Signor Moro on Saturday to

Hearst newspapers last week, President Ceausescu said he wanted to talk to Mr. Carter about the problem of bringing peace and reunification to the Korean peninsula.

Middle East

Israeli-Egyptian peace negotiaby an international conference on the Middle East that would bring the PLO to the confere-

#### Met PLO envoy

that the Romanian president has discussed the Middle East situation with a special envoy sent by Palestinian leader Yas-

sary yesterday the Palestinian issue was the "essential problem" in the Middle East and the PLO should take part in peace negotiations. Mr. Arafat was originally due to visit Bu-charest to brief Mr. Ceausescu on PLO views before the Romanian leader left for the United States

his personal political adviser Hani Al Hassan to confer with Mr. Ceausescu. PLO officials had no explanation for Mr. Arafat's decision not to make the

Mr. Ceausescu discussed Middle East developments with Israeli Foreign Minister Moshe Dayan here last week. Mr. Da-yan rejected the Romanian le-ader's view that Israel should negotiate with the PLO.

In an interview published in Tel Aviv today the Romanian president said that Israel's response to the peace overtures of Egyptian leader Anwar Sadat had not measured up to

the interview in the Englishlanguage Jerusalem Post that a comprehensive Middle East settlement could only be worked out with the participation of Syria, Jordan and the PLO. He was quoted as saying: "I must say that as against President Sadat's firm initiative the response from Israel and

from Premier Menachem Be-

gin has not been up to expec-

tations, or at least has not been so far."

The Romanian leader added: "The achievement of a comprehensive peace settlement implies participation in the negotiations of Syria, Jordan and the Palestinians, represented by the PLO. This is the only framework within which a general peace can be achieved."

Arafat says Israeli invasion damaged 82 villages

NEW YORK, April 11 (R). — Palestine Liberation Organisa-tion (PLO) leader Yasser Arafat said in an interview broadcast here last night that Israel's invasion of southern Lebanon last month had damaged 82 villages, demolishing six of

Mr. Arafat said the Israelis had used not only United Sta-tes-made cluster bombs in the invasion but also other U.S.

In the interview with NBC-TV news, which was recorded in Beirut, the PLO leader said the U.S. had supported "your mighty baby Israel" in the fighting against the Palestinians.
"Your American cluster bombs -- eighty-two villages had
been shelled and bombed by

your Phantoms, Skyhawks, napalm, rockets and now your cluster bombs." Mr Arafat said Six of this number had been smashed and demolished com-

#### U.S. confirmed

The U.S. state department confirmed reports on Saturday that Israeli forces had dropped cluster bombs in southern Lebanon in violation of a mutual defence agreement.

The bombs, which scatter shrapnel grenades over a wide area, come under a 1952 agreement between the United States and Israel which allows th-

eir use only in specified cases.

Asked about Palestinian extremist groups that kill civilians, Mr. Arafat agreed that some Palestinians engaged in such

"You, the Americans, are pushing them. You are not recognising us as a people," he

### At least 20 killed in fresh factional fighting Beirut BEIRUT, April 11 (Agencies). - Lebanon's civil war forces battled each other with machineguns

and rockets today despite a Syrian warning that gunmen in Beirut would be shot on sight. Combatants in the Moslem district of Shiyah and neighbouring Christian Ain Rummaneh, -- flashpoints of the 1975-76 civil war agreed that at least nine people had been killed and more than 30 wounded since fighting erupted on Sunday.

The Syrian-dominated Arab League deterrent force policing the civil war truce issued a communique last night saying the force would shoot any gunman on sight and shell any source of fire.

But rightist militiamen in Ain Rummaneh and Lebanese leftists hammered each other in the heaviest fighting since last February's clashes between Syrian troops and rightists in which at least 150 people died. The deserted streets along the line dividing the two den-sely-populated districts echoed with the roar of heavy machineguns and the crash of exploding rockets.

#### No deterrent

Asked what he thought of the deterrent force warning, a right-wing militiaman in Ain Rummaneh burst into laughter. "Deterrent force" he said. "Which deterrent force? It is not deterring anybody, as you

The 30,000-strong Arab Lea-gue force ended the civil war in most of Lebanon in Nov. 1976, when it moved into the main combat zones to separate the combatants.

Most roads linking the two districts were closed today. Civilians sprinted across stretches exposed to firing positions on the other side as snipers took over rooftops.

Both sides accused each other of having started the fighting. As usual in this city of contrasts, life continued normally in areas not affected by

#### Localised fighting

At noon Arab peacekeeping forces opened fire at rival Moslem and Christian militias in southeastern Beirut witnesses reported.

CHICAGO, April 11 (R). — Former California governor Ro-

nald Reagan today derended Is-rael's West Bank settlements

and said Israel could not be es-

pected to pull back to borders

that would leave it open to artillery attack. "Israel has ne-

ver tried to annex the West

Bank and the present admini-

stration in Washington is de-

ad wrong when it says Israel's West Bank settlements are il-

legal," Mr. Reagan told a di-

nner meeting of local Jewish

He said U.N. resolution 242

"makes it plain that Jewish and Arab Palestinians have a

right to settle there until Jor-

dan and Israel between them

decide on secure and recogni-

leader, a candidate for his par-

ty's 1980 presidential nomina-tion, also said, "for the U.S. to suggest that Israel fall back

to borders which leave porten-

tial enemies within artillery

range of its very heartland is

dishonest unless we are willing

of strong American support and

Carter's early backing, later wi-

thdrawn for self-rule for West

to offer an iron-clad guarantee

The conservative Republican

leaders here.

sed borders"

defence

The Arab Truce enforcers Meanwhile Israeli occupation went into action to snuff out three days of Moslem-Christian sniplng and intermittent mortar exchanges on the capital's edge.

The fighting was localised. But the staccato of machine gun voileys and thuds of explosions scared people off the streets in adjacent neighbourhoods.

Truckloads of reinforcements and armoured personnel car-riers cordoned off the area of local hostilities that stole public attention from developments in south Lebanon, where U.N. troops were supervising a partial Israeli withdrawal.

forces maintained firm control over most of south Lebanon today, despite a withdrawal from part of the territory they selzed in a massive invasion a month ago.

Heavily-armed troops entrenched in scores of fortified positions around the southern port city of Tyre prevented Lebanon-based correspondents from entering the occupied zone to confirm the limited pull-

Lebanese and United Nations officials in Beirut said they had received no official word on the evacuation.

Foreign Minister Fuad Butros told reporters the government was making every effort to secure a clear and final timetable for a total Israeli withdrawal without prior condi-

A U.N. spokesman said Maj.-Gen. Emmanuel Erskine, com-mander of the Interim Force in Lebanon (UNIFIL), visited the eastern sector of the zone today but there was no official confirmation of the withdra-

One analyst said the Israelis still held hilltop positions with commanding views over territory said to have been evacuat-

# Norwegians make token withdrawal in S.

RASHAYA FOUKHAR, Lebanon, April 11 (R). - Israeli soldiers pulled back a short distance from their forward positions in south Lebanon today in a first, reluctant stage of the full withdrawal decreed by the United Nations security co-

Smartly-uniformed Norwegian troops took over from the duststained Israelis who piled into armoured carriers and rumbled off a few kms. downs the

The pull-out from seven points in the eastern sector of south Lebanon took the Israe-

ven kms. Observing the hand-over in this shattered village, ten kms.

Reagan supports Israeli

settlements on West Bank

from the Israeli border, was Gen. Emmanuel Erskine, Ghaaian commander of the United Nations Interim Force in Lebanon (UNIFIL).

Bank Arabs, with Israel provi-

ding security in the area.
"It is another of the vacilla-

tions which are all too charac-

teristic of this administration's

foreign policy," he said. The 67-year-old former actor also criticised the Carter admi-

nistration for placing responsi-

bility for Palestinian refugees

on Israei rather than Jordan,

and for urging Soviet partici-pation in Middle East peace

be imposing or even advancing

conditions upon which a peace agreement in the Middle East

must be predicated," he said.

"Nor should our government

deliberations.

Today marks the beginning By the time the Israelis arrived of the major withdrawal," Gen.

"Our job is to see that the area is not used for hostile ac-Asked whether the U.N. fo-

rces would fire on Palestinian guerrillas, Gen, Erskine said : We will fire on anyone who makes it difficult for us to execute our duties." Israelis have been openly

sceptical of U.N. willingness to resist Palestinian violence -especially following weekend reports that Norwegian soldiers retreated in the face of Palestinian gunfire at Kaoukaba, about 16 kms. north of here. Gen. Erskine said he believ-

ed the UNIFIL would need more troops in the eastern sector to fulfil its mandate. Rashaya Foukhar was a Palestinian stronghold before the Israelis crashed across the Le-

banese border on March 14. The scale of devastation testified to the heavy Israeli air and artillery bombardment wh-

ich chased the Palestinian out of the village.

The village used to be a

Christian community of 2,000 people. In the middle of the town could be seen the shattered belfry of a Christian church,

lis as they pulled out of the town and took up new positions two kms. down the road Control of the village was taken over by detachment of

only eight civilians were still

Some died in the ruins.

Most of the others fled

Two Christian women rum-

maging through the wreckage

shouted angrily at the Israe-

about 40 Norwegian soldiers. Gen. Erskine said that UNI-FIL so far had about 1,800 of its prescribed 4,000 men in the field but he said the arrival of bring the force up to 2,500.

Gen. Erskine declined to say whether the "good fence" border point between Israel and south Lebanon would be maintained after UNIFIL completed

its take-over. "That is a political decision." he said.

But Israel has made plain it would be very reluctant to close this point of contact with the south Lebanese Christian

Newly-paved stretches of road laid down by the Israelis inside south Lebanon indicated that the Israelis still hoped to have contact with parts of the region, at least.

#### New opinion poll shows Weizman's Dayan's rising,

TEL AVIV, April 11 (R). — The popularity of Defence Minister Ezer Weizman has risen in recent months, but that of Foreign Minister Moshe Dayan has waned, according to a public opinion poll published here today. The poll, in the independent Haaretz daily, showed that Mr. Weizman's popularity was 78.3 per cent this month -- 6.7 per cent more than in January. In the same period Mr. Dayan's popularity dropped by 5.9 per cent to 60,2

### Carter explores new ground to curb arms race with Soviet Union "political reasons."

WASHINGTON, April 11 (AP). - U.S. President Jimmy Carter is underscoring his determination to curb the arms race by opening exploratory talks with the Soviet Union on banning hunter-killer satellites in space and resuming separate negotiations on arms sales, to developing nations. At the same time, negotia-

Mr. Reagan accused President Carter of waffling in his support for Israel, citing Mr. tions for a new treaty to limit U.S. and Soviet long-range bombers and intercontinental ballistic missiles are entering a critical phase with U.S. Secretary of State Cyrus R. Vance's mission to Moscow late next By moving on all three fro-

nts, Carter appears to be undertaking a concerted drive to fulfill his 1976 presidential campaign promise to take the lead in curbing the arms trade -- even while he has not made good on the twin promise to cut U.S. defense spending.

Carter is making his moves at a time when the U.S.-Soviet relationship may be at a vital iuncture.

Just last Friday, speaking from the deck of a navy warship off Vladivostok, Soviet President Leonid Brezhnev accused Carter of stalling on a new weapons agreement for

Brezhnev said the U.S. administration was showing "indecision and inconsistency" in deference to domestic hard-lin-

#### Symbolic scene

The scene of the speech was symbolic -- near the Siberian city where three and a half years ago Brezhnev and President Gerald R. Ford concluded a tentative agreement to limit strategic weapons. That agreement has yet to be completed and put in treaty form.

#### Vance defends Carter's policies: Page 6

Over the last several weeks, the United States and the Soviet Union have pelted each other with accusations and veiled threats. Carter, in a March 1 speech, raised sharp questions about the direction of Soviet

The new rounds of negotiations could reverse that trend. So far, only the Russians have developed the capability to seek out satellites in orbit

and destroy them. Vance first broached the idea of banning anti-satellite weap-

a year ago. Last month the administration formalised the proposal.

Within a few weeks, even

ons during a visit to Moscow

while questioning U.S. interest in arms control, the Russians agreed. A site is to be selected for the talks, which are planned for sometime next month The arms sales negotiations, meanwhile, are directly linked to Carter's campaign commitment to reduce U.S. weapons proliferation.

Talks on this subject are especially aimed at curbing sales to developing nations. In 1976, according to U.S. estimates, the Russians delivered \$2.19 billion worth to such countries while the United States supplied almost \$4 billion in arms.

#### Sales could increase

In his race against Ford, Carter charged U.S. arms sales "fuel regional arms races and complicate our relations with other supplier nations."

As president, he has ordered an eight per cent cut in new commitments, but also propo-sed selling U.S. jets to Egypt, Sudan and Saudi Arabia in order to improve relations with moderate Arab countries

#### his release and added: "Otherrd. But police sources said the wise you will be responsible killing was very similar to two previous Red Brigades murders. for my death". World News Roundup...

·ed.

#### Eritreans accuse Ethiopia of bombing ROME, April 11 (R). - Eritrean rebels said today that MiG jets

were dropping napalm and cluster bombs on villages near Asmara and Massawa apparently in preparation for an Ethiopian offensiv in the country's northernmost province. 'Their strategy first of all is to retake the road between the capital, Asmara and the port of Massawa," Mr. Gabray Tseghai of the Eritrean People's Liberation Front (EPLF) told Reuter. "This is their most important supply line". . Soviet U.N. official defects

JUNITED NATIONS, April 11 (AP) — Arkady N. Shevchenko, the highest ranking Soviet citizen employed by the United Nations, is staying away from his job because of "differences with his vernment," a U.N. spokesman said yesterday. Shevchenko, a Ukrainian, is a salaried employee of the U.N. secretariat and is not a member of the Soviet government's U.N. mission. In Washington, State Department spokesman Tom Reston said the department had been contacted by Ernest Gross, Shevchenko's New York lawyer, and Gross indicated the Soviet official would not return to the Soviet Union. But Reston said Shevchenko had not asked for asylum in the United States. He said Soviet officials had requested a meeting with Shevchenko and Gross had arranged

#### Shah meets Saudi defence minister

TEHRAN, April 11 (R). - The Shah received in audience here today Saudi Arabia's Minister for Defence and Aviation, Prince Sultan Ibn Abdulaziz, Iran's War Minister, Gen. Reza Azimi, and the Sandi Arabian Ambassador here, Mr Ibrahim Bakr, were also present, official Iranian sources said.

#### Begin to be checked up

JERUSALEM, April 11 (AP). - Israeli Prime Minister Menachem Begin will enter a hospital for a routine checkup Wednesday, his office announced today.

#### Single shot killed kidnapped baron

ANTWERP, Belghon, April 11 (R). - Kidnapped Belgian millionaire Baron Charles Bracht whose body was found yesterday was killed by a single shot in the head, police sources said today. The sources said police believed the baron had been killed while struggling with the captors. Blood and tufts of hair were found on the ground near the beron's car.

#### Burns takes issue with Carter's dollar policy

TOKYO, April 11 (R). -- Mr. Arthur Burns, the conservative former Chairman of the U.S. Federal Reserve Board (central bank), today publicly took issue with the Carter administration's attitude towards the dollar. Speaking only hours before President Carter unveiled his anti-inflation strategy, Mr. Burns called for strong government action to halt the dollar's decline.

# Maj. Gen. Emanuel Erskine (right) Commander of UNIFIL shakes hands with an unidentified Israeli army officer in occupied south Lebanon on Tuesday morning as the Israeli forces began a token pull out. (AP wirephoto)

WASHINGTON, April 11 (R).

prison

ing The killing of an antiterrorist policeman shortly after the trial started had no ef-Only three of the 15 detained Red Brigades came into co-American officials expressed urt in their self-appointed role of observers. The 'defendants have been charged with form-

> of the divided country. In an interview published in

The Romanian leader, whose country is the only Communist state maintaining relations with Israel and all its Arab neighbours as well as with the Palestinian Liberation Organisation (PLO), said he also wanted to deal with the Middle East in

his talks with Mr. Carter. He indicated that the stalled tions should now be followed

In Bucharest it was reported

ser Arafat. Mr. Ceausescu told the emis-

Instead the PLO leader sent trip himself

expectations Mr. Ceausescu also said in Arabs unanimous on need for sound preparation of summit, says CAIRO, April 11 (R). - Arab It was reported from Kuwait that Sudanese President Jaaf-League Secretary General Ma-

hmoud Riad, back from a tour of seven Arab countries, said today he found unanimous agreement on the need for sound preparation for an Arab summit Mr Riad, speaking to reporters at the airport on his arrival from Bahrain, said he also found agreement on the need for the restoration of Arab solidarity -- shattered by sharp differences over President Anwar Sadat's peace overtures to Israel.

ar Nimeiri has called for a meeting in Khartoum on April 22 of an Arab reconciliation committee set up to prepare for an Arab summit conference. Kuwait Foreign Minister Sheikh Sabah Al Ahmad Al Sabah said this man interview with the official Kuwait News Agency (KUNE) which also quoted Sheikh Sabah as saying Kuwait was ready to join the commit-tee "if all Arab states asked to ioin agree to do so."

RAMI G. KBOURI Managing Editor: JENAB TUTUNJI

Éditorial Staff :

ALAN MARTINY

Board of Directors: JUMA'A HAMAD . RAJA ELISSA MOHAMAD AMAD Deputy Managing Editor: MARMOUD AL KAYED BASSAM BISHUTT

Responsible Editor: MOHAMAD AMAD

Editorial and advertising offices:

Jordan Press Foundation

University Road, P.O. Box 6710, Amman, Jordan Telephones: 67171-2-3-4

:Tix: 1497 Al Rai JO, Cables: JORTIMES, Annuan Jordan

The Jordan Times is published daily except Mondays. Advertising and subscription rates are available from the Jordan Times advertising dept.

# The tyranny of stamp men

The effort now underway to revamp the entire civil service structure in Jordan is probably the single most important link in Jordan's long-term developmental drive, and we sincerely hope that the campaign to streamline and improve the efficiency of the government bureaucracy is carried through rigorously and effectively. If it is not, we will only be fooling ourselves, a luxury that we cannot afford. The most important element in the reorganisation of the civil service is the need for decentralised decisionmaking, and it is a good sign that this will get high priority.

But the overall requirement in this reorganisation effort is to sit down and discuss very basic concepts such as the aims of individual offices and whether the system of work now used in the government helps or hinders efforts to reach one's stated goals. For example, we recently had a rather mind-boggling experience at the Interior Ministry. Going in to apply for a routine permit for a foreign tourist to visit Jordan across the King Hussein Bridge, we were told to get a 30 fils stamp before the paperwork could be processed. At 12:30 p.m., the man who sells stamps outside the ministry had closed shop and gone home, and we were told that we had to come back the next day. But the Interior Ministry personnel were in their offices working until 2:30 p.m., and we ended up unable to process the paperwork until the next day. This is the result of a bad system that produces bad results. This is a small example, but it is typical of the archaic system by which things are done. If the stamp man decides to go home for lunch early, does work grind to a halt in every ministry?

These are the underlying factors that must be thoroughly discussed in coming up with a reorganised civil service. A more streamlined and efficient of management is required, and forward to progress in this area.

#### ARAB PRESS COMMENTARY

AL RAT Tuesday dealt with reports from Cairo saying that a Romanian envoy has recently acquainted the Egyptian leaders with a plan prepared by President Ceausescu for the reconvening of the Geneva Middle East peace conference with all parties concerned taking part.

It was reported that President Ceausescu will inform President Jimmy Carter of his plan when he meets him in Washington within the next few days. The newspaper says that Israeli Foreign Minister Moshe Dayan might have been briefed of the plan during his recent visit to Bucharest, whereby the Romanian leader became convinced to go ahead and announce the plan within the next

However, Al Ra'i adds, the Romanian plan, like many previous ones for a settlement, will not carry with it a balsam for curing Arab differences, nor will it solve the problem overnight. Hence Arab unity of action and building up Arab power, as now sponsored by Jordan, remain the most important things. Any solution that comes from outside, in the absence of an Arab capability to influence the course of events, will only be to the disadvantage of the Arabs, the newspaper says.

Under the heading "A Whiff of the Plot", AL DUSTOUR speculates that the recent bloody clashes in Beirut between the Phalangists and the Palestinians were an attempt, a plot, to "re-kindle

the fuse following Israel's occupation of south Lebanon."

The newspaper asks: "Is it a new episode in the Lebanese tragedy which engulfed Lebanon two years ago and has not finished

Al Dustour points out that Israel, which is due to withdraw partially from south Lebanon today, is engaged in building fortifications there. Such a withdrawal is a theatrical move of no value; and political observers see it as a mere attempt to alleviate world pressure upon Israel to implement Security Council Resolution 425 calling for a complete and immediate pullback from south Lebanon the newspaper maintains.

## WHAT'S GOING ON

#### Art Exhibition

Paintings by Ibrahim Najjar Abul Rub are on display daily at the Goethe Institute till next Saturday.

The British Council is showing "Lord of the Flies," a film directed by Peter Brook, tonight at 6:30. Reserve free tickets before the performance.

#### Cookery Exhibition

There will be a Spanish cookery demonstration this morning at 10:30 at the YWCA, near 3rd Circle, Jabal Amman, given by Countess Maruja Ondino.

# Grand plans are envisaged for thermal springs at Zarqa Ma'in

Text and photos By Barbara Beesley Special to the Jordan Times

Although much publicity has been given in recent years to Jordan's archaeological sites and antiquities the natural phenomena of Jordan's thermal springs (of which all but two are also classified as mineral) has gone largely unnoticed.

For centuries man has taken advantage of the therapeutic effect of such springs and great spas have been developed in different parts of the world. The earliest evidence of such use of the springs in Jordan can be found in Madaha, where a mosaic depicts Herod bathing presumably at Zarga Ma'in. Remains of Roman baths are to be found ar Zarqa, near Jarash and at al Hammeh and Abu Dableh in the north.

Since the days of the Romans the springs seem to have declined in popularity and only in recent years has any attempt been made to develop the springs for the use of the general public, and then only in a very simple manner

In the 1960's Al Hammeh was developed by a private company to the extent that there now exist a swimming pool, rest house, restaurant and campground. At about the same time the site at Zarga Ma'in was developed, also in a very simple way, by the government, with similar facilities to those at Al Hammeh -chiefly a swimming pool built round one of the hot springs which is open seven days a week and caters to male and female bathers on a rota basis throughout the day.

On either side of the river nearby is the camping area where tents may be hired for overnight stays. There are also a few chalets for hire. Up a flight of steps one reaches a ridge on which stands a swimming pool dating back to King Abdullah's time and now re-served for 'special visitors'.

All this is rather primitive compared with the grandiose plans now being drawn up for a major spa complex at Zaroa Ma'in. The Jordan Times visited the Ministry of Tourism and Antiquities and interviewed-Mr. Abdul -Khader Shuman project officer for the developent of Zarga Ma'in, and later visited the site to bring back this report.

#### The Zarqa-Ma'in springs

Sixty five kms. southwest of Amman at the end of a road which turns off the King's Highway at Madaba lies a deep gorge set in the midst of a ascape pordenni the Dead Sea. As one descends the steep winding road on the north side of the gorge to the river far below the first of the thermal springs of Zarqa Ma'in comes into sight. There are 59 springs in all which join the river, basically a cold fresh water stream, either by bubbling out of the ground at just above water level or by falling in cascades from the rocks high above. The most spectacular of the waterfalls is Al Shallal. The river is shallow and since the sides of the gorge rise sharply the near felt quite keenly as one walks

through the pass.
Although scenically beautiful (the area is a proposed national park) it is not primarily the scenery that now draws thousands of visitors a year to Zarqa Ma'in. Rather they come to take advantage of the alleg-ed therapeutic properties of the spring water which is not onextremely hot (45°-63°C ereas the maximum temperature needed for a spa 35°C) but is also very high in

mineral content.
According to German standards (DDS) a spring can be classified as mineral if the total ratio of dissolved salts in



AL SHALLAL WATERFALL -- "Crown" of the hot springs, situated in middle of the gorge. In the master plan it is intended to emphasise this spectacular waterfall; a dam will create a reflecting pool. Visitors will be able to go to the foot of the falls by means of a pedestrian bridge.

the water is not less than one skin diseases is mentioned in thousand per million. Tests at Zarqa Ma'in have shown the dissolved salts to constitute 2,000 units per million. This excellent concentration of salts places the springs in the same category medicinally as those at some of the best known spas in Europe. At Lueker Bad in Switzerland for instance, which yearly attracts several hundred thousand visitors from all over Europe, the temperature and discharge of water are much less although the mineral properties are sim-

The plan to develop the site at Zarqa Ma'in into a spa was formulated in the early 1970's. but first the mineral content of the water had to be determined to judge the feasibility of a spa. Water analysis tests were carried out; The chemical- biological analysis was completed in Germany by Institute Fresenius at Wiesbaden. The results proved positive for development of a spa the mineral water being classified as sodium. calcium chloride therm. It is of therapeutic value for rheumatism and joint pains and also beneficial to the pharynx and upper respiratory tract. It contains a high concentration of fluorine -- which is very good for children to drink, as it prevents tooth decay. Radioactivity is present but in a low concentration not affecting the human body. Very little sulphur was detected and therefore no therapeutic effect on

#### Master plan

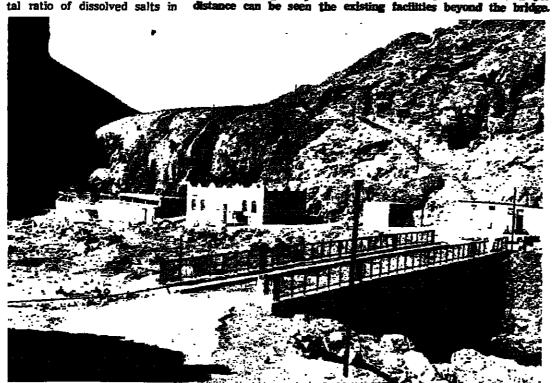
Having been given the goahead by the results of these tests, the master plan's terms of reference were drawn up by the Ministry of Tourism toge-ther with the National Planning Council and tendered on an international level. A Swiss firm Societe Generale pour Industrie was chosen in association with a local firm of co-A. R. Jardaneh to prepare the nsulting engineers Mohammad master plan and design the installations. For this a fee of J.D. 100,000 would be paid. The first and second reports were submitted last year and the final report was handed in re-

The Master Plan: Terms of Reference stated a policy to 'assure preservation of scenic and mineral water assets of the area and allow for their systematic use both by visitors. and industrial users." the lat-ter a reference to the propos-ed preparation of bottled minerai water at a later date

Great care has to be taken if the scenic beauty is not impaired as the gorge is very narrow and there is little room for development. Since the op-ening of the access road the number of visitors to the site has increased to the extent that the carrying capacity of the road has been exceded and the unique nature of the site



GENERAL VIEW of Zarqa Ma'h taken from the road which winds its way down the northern slope of the gorge in a series of breathtaking hairpin bends. Far below the river and in the



PUBLIC AMENITIES as they exist for today's visitors. In the middle of the picture is the new mosque built last year. The other buildings date back to the sixtles and include on the left, a cave pool, and a few chalets. The steps behind lead up to the Emir's pool (named after King Abdullah in whose reign it was built) and further chalets, now closed. This is the site for the new Hotel Complex and Thermal Clinic. All existing buildings will eventually be demolished although not until the buildings replacing them are completed and ready for use

is being threatened by destruc-tion of the vegetation and pollution of the waters.

Fortunately the consultants are aware of all these problems, and state in a special report issued in late 1977 that "facilities must be provided to accommodate a relatively high number of visitors as a matter of ecological protection and social welfare for users."

The main natural scenic features must be preserved and emphasised. Existing natural conditions will be preserved to offset the impact of deve-lopment. In particular the right bank of the river, from which all the springs flow, will be maintained as it is in contrast to the garden proposed on the left bank

"Contrasts between the river and hot springs water of Ma'in Valley and the bare colourful rocky slopes and cliffs should be preserved ... Architecture should seek to blend with the

iandscape," the report adds.
"Protective perimeters must be created to prohibit public access in order to protect fresh water catchment and larger hot springs destined for use by visitors to the site.

"Excavation and erection should be conducted with extreme care, in most cases without explosives or heavy excavating machinery, to prevent disturbance of hot springs and andslides.'

#### Development in two phases

The development of the spa complex will be executed in two phases. Construction will start on the spring and is expected to continue for four years. Phase I includes a public restaurant opposite the waterfall of Al Shallal with parking facilities nearby. The restaurant will seat up to 300 outside and 150 inside, with room for future extensions. A new low income bath with a cavelike tepidarium will be located within a new campground near a projected arch bridge. It will be able to handle 1,000 visitors daily (500 male and 500 female). Together with the new mosque across the road it will mark the entrance to the valley garden. The new mosque will stand in a wooded area. The campground will provide facilities for approximately 300 visitors and bungalows for 60 to 100 people or a second campground; will be builty slightly further up; stream. On the hill above will be picuic units with room for 300 to 400 daytrippers. More picnic units and/or campground

sites are planned above these

facilities at a later date.

Phase II includes that part of the complex which will attract higher income visitors -- this will primarily be the construc-tion of the hotel complex and thermal clinic. The hotel will contain approximately 100 rooms. The six-floor building will be set in tiers into the side of the hill. Architecturally it will have an oriental look and match the surrounding landscape. A new high/middle in-come bath with a cave like tepidarium will be situated on the Al Shallal promontory winich is at present inaccessible. A road will be constructed along the north side of the gorge leading to the hotel which will also serve the bath and a landscaped viewing point is to be created on the rim of the Al Shallal plateau More picnic units /campground sites are proposed on the slopes. During the construction of the complex existing facilities will be available to visitors and care taken to allow camping to continue.

The consultants suggest alternatives for facilities favouring either a) low income b) middle income or c) high income visitors. As it is unlikely that more than a small minority from the high income bra-cket will be attracted, and as there is insufficient room for extensive low income facilities on the large scale necessary, the favoured plan is to give priority to mixed middle/low income facilities. The total capacity for visitors an residents at the end of Phases I and II would therefore be approxima-tely 2000 per day of which about 45 per cent will be low income, 47 per cent middle income and 8 per cent high income visitors.

Characteristics of the site (geology, hydrogeology, scenery) will induce high development costs. It is probable that part of the investment will be considered as a subsidy, the rest being divided into soft and commercial loens.

It is suggested by sultants that

a) financing of infrastructure components within hot spring development such as fresh water supply, sewage and sanitation systems should be by means of soft loans, and that b) financing of the main facilities such as hotel complex baths should be by means of

commercial loans and c) financing of interstitial development i.e. afforestation: landscaped garden, fences and dykes should be by means of net budget allocations through the Ministry of Tourism.

Total investment is initially. estimated at JD 2.7 million,



THE MAP shows the locations of the thermal springs in Jordan. From Al Hammeh in the north near the Syrian border to Afra in the south. All but two -- Afra and Abu Dable -- are also mineral. The three largest are Al Hammeh, Zara and Zarqa Ma'in. Ghor Al Hadeste is relatively small but sulphorous and used by locals for skin diseases. Afra, although hor mineral, has excellent discharge and is very hot -- 45°C. At Azrae the hot spring which was originally discovered whilst digging for a well, is temporarily compressed since it is quite small and the Ministry of Tourism and Antiquitles will be channelling the flow into two swimming pools to be built shortly at a tourist centre adjacent to the spring. Abn Al Zieyhan has not been tested but is obviously sulphurous. Al Hammeh was developed by a private company In the 1960's and offers basic amenities for the visitor -- swimming pool, restaurant, campground etc. Zara, potentially the most interesting of all, since the site is on the shore of the Dead Sea, developed not only as a spa but also as a Dead Sea resort when the new highway running along the eastern shore of the Dead Sea is finished in two year's time. At present the site is inaccessible to the general public. Zarqa, near Jerash, has an excellent concentration of salts similar to Zarqa Ma'ln.

#### WANTED

A caravan in perfect condition, without customs duty.

Please phone: 42746.



#### WANTED

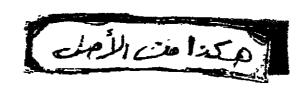
Small villa two or three bedrooms, central heating, garden, quiet area. Phone 56523.

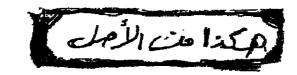
#### TWO DELUXE APARTMENTS FOR RENT

Two just completed deluxe apartments. Each composed of three bedrooms with built-in closets, two bathrooms, salon, living and dining rooms. Centrally heated. Bathroom and kitchens are very well equipped.

Location: Near Second Circle between Mount Hotel and Y.M.C.A.

Call: 41048 daily between 4:00 and 6:00 p.m.





# National News Roundup...

UAE to support Arab university in Nablus

BU DHABI, April 11 (R). — The United Arab Emirates UAE) has promised to support a newly-created Arab niversity in the Israeli-occupied West Bank town of lablus, the Emirates News Agency reported. The pledge vas made by the UAE President, Sheikh Zayed Ibn Sulan Al Nhaiyan, when he met the former Mayor of Nalus, Mr. Hikmat Al Masri last night, the agency said. t quoted Mr. Al Masri as saying he delivered a message rom King Hussein concerning the Al Najah National Iniversity in Nablus, which was created last year.

#### Arab tourism committee meets

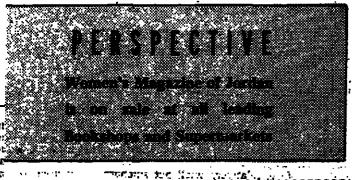
MMAN, April 11 (JNA). - An Arab committee studyng the transformation of the present Arab Tourism Inion into a specialised agency met in Amman today nder the chairmanship of Minister of Tourism Ghaleb arakat. The committee which comprises representaties of Jordan, Iraq, Egypt, Kuwait and Algeria discussed Are le basis for establishing the agency, financial affairs nd relations with the Arab League. The formation of le committee was a upon a recommendation by the rab ministers of tourism at their last month's meeting ı Amman.

#### Taxi fares go up

MMAN, April 11 (JNA). — Taxi fares are to go up by urty fils, Minister of Transport Ali Suheimat announed today. He said taxi meters will from now on register 50 fils instead of 120 at the start of a trip.

#### Third childrens book exhibition takes place Thursday

MMAN, April 11 (JNA). — The third childrens book thibition will be opened Thursday at the King Hussein lub, Jabal Amman under the auspices of Crown Prince assan and Princess Sarvath. The exhibition is being ganised by the Friends of the Children Club, in coopetion with the Arab Centre for Research and production.



week the id to me and they are bed to the the

#### FOR RENT TWO DELUXE APARTMENTS

Control of the

50 2 3 2 E

-elima (🖢 🏭 · 6 - 318 15

arn freind han

ca the a princip

1.0

72.2 P. 1513.

.....7 pa pi

1.50

12.7

Each consisting of three bedrooms, three bathrooms, living room, dining room, kitchen and balcony, with central heating.

w App of the in a Mark Third Circle, near old Orthodox Club.

Possible to rent the two apartments or the whole four storey building.

For further details please contact tel. 65948/9 or 61450 - Amman.

#### URGENTLY REQUIRED

Full-time female telex operator. Good knowledge of English essential.

Salary according to age and experience.

For further information tel. 44405-44301, Amman.

## Top level medical team from Edinburgh Univ. visits Univ. of Jordan

By Breda Finegan Special to the Jordan Times

AMMAN, April 11 (JT). — A top level delegation from the University of Edinburgh arrived here Monday evening on a five day official visit, Dr. Kamel Allouni, head of the University of Jordan Hospital, told the Jo-Idan Times today. The team includes the Dean of the Medical School at the University of Edinburgh, Prof. R.H. Girdwood, the Vice President of the University, Mr. A.I.S. McPherson, Professor of Radiology at the University, Prof. Eric Sam-

well, and Dr. H.M. Cameron, Senior Lecturer in Pathology During the visit, which is in response to an invitation extended by the former president of the University of Jordan, Dr. Ishaq Farhan, the delegalook into all services offered by the university hospital, the system of teaching used there and the standard of the students.

This visit is the second in a series of contacts with Edinburgh University which began last month when a team from the University of Jordan went to Edinburgh to investigate changes in the medical curriculum

there.
"It is hoped," Dr. Allouni
told the Jordan Times, "to increase collaborative work and research between the two uni-

At the moment the possibility of beginning an exchange programme between the universitles is under review. This programme will be for professors and graduate M.D.'s working in the bospital.

The delegation is expected to return to Britain on Satur-

AMMAN, April 11 (JT). Great news for cookery fans! At 10:30 Wednesday morning La Contessa Maruia Ondino wife of the Spanish ambassador to Jordan, will be demonstrating her culinary skills for the nefit of all at the YWCA building near Third Circle.

La Contessa will reveal the secrets of four popular Spanish dishes -- yes, including pa-ella! -- and all those present will be invited to sample each dish, and will receive a copy of the recipes which includes

some useful serving hints.
The demonstration is the third in a series of international cookery demonstrations start-

ed by the Programmes Committee at the YWCA two months ago in which Italian and Chinese dishes have already featured. These drew crowds of 101 and 80 respectively.

The demonstrations take piace on the second Wednesday of every month and so far the Programmes Committee has had no trouble in finding eager ladies from various embassies and cultural groups to take

The entrance fee is 500 fils and will cover the cost of tea and biscuits. So go along, have a nice morning and add a few more recipes to your international cookbook.

# Economic and Business News

Alia, PIA talks under way

KARACHI, April 10 (R), - Chairman of Alia, the Royal Jordanian Airline Ali Ghandour yesterday met officials of Pakistan International Airlines (PIA) and afterwards told reporters new areas of collaboration between the airlines were being discussed. Mr. Ghandour, who arrived here Sunday with a high-level delegation, expressed satisfaction over cooperation between the airlines during the past eight years.

#### Jarash Municipality gets JD 700,000 loan from ministry fund

JARASH, April 11 (JNA). - Jarash Municipality has obtained a JD 700,000 loan from the credit fund of the Ministry of Municipal and Rural Affairs to carry out a number of projects in the city, the Jarash district governor said today. He said the municipality will soon construct a sewerage system and a station for purification of water in the city. Other projects to be financed by the loan include the construction of a children's park and the building of an underground reservoir with a capacity of 200 cubic meters of water.

#### Revenue from income tax up 76 per cent

AMMAN, April 11 (JNA). — His Highness Crown Prince Hassan was today informed that income-tax collection during the first quarter of this year rose to 76 per cent over the same period last year. Last month income-tax revenue hit a record number of nearly JD 2 million. The Crown Prince paid a visit to the Income Tax Department and discussed with Finance Minister Mohammad Dabbas and Director of Income Tax Department Saleh Khasawneh ways of developing tax-collection to include all categories of income earners, and the introduction of a computerised system.

Channel 3:

Channel 6:

7:30 News in Hebrew 7:48 Varieties

A News 1.

Al News 1.

Al Music

Al So Beethoven

15:00 Concert Hour

16:00 Pop Session

17:00 30 Minutes of Jazz

17:30 Pop Session

18:00 News Summary

Apriment:
Sabbagh (23157)
Na'eem (36194)
Sth Circle (41112)
Hindi (24422)
Irhid:

19:00 19:10 19:30

Ded's army Duchess of Duke

Sports and the youth Arabic secies Television magazine

JORDAN TELEVISION

RADIO JORDAN

**EMERGENCIES** 

7:00 7:01 7:30 7:40 10:00 10:02 10:30 11:00 12:00

12:03

Doctors:

Taxis:

Radwan Al Sa'd Zarqa : Ghazi Rousan (C

# Coming

#### Pakistani military delegation leaves

AMMAN, April 11 (JNA). — The Pakistani military delega-tion led by Lt.-Gen, Sadeq Rasheed Abbasi left for home today after a several-day visit to

#### Ghaleb Barakat will head delegation to Mexico City

AMMAN, April 11 (JNA). A Jordanian delegation led by Mr Ghaleb Barakat, the Mini-ster of Tourism, will leave for Mexico City on Thursday to attend a four-day world conference on tourism and air transport due to start on April 17. The International Tourism Organisation and the Internation-Air Transport Association (IATA) are co-sponsors of the conference which will tackle subjects as promoting world tourism as well as looking into 18 working papers dealing with air transport and their matters related to touri-

#### Al Masirah editor leaves

AMMAN, April 11 (JNA). The Chief Editor of the Bahraini newspaper Al Masirah, Khalifeh Hassan Qasem, left here this evening after a fiveday visit to Jordan.

#### Bahraini cardiologist leaves

AMMAN, April 11 (JNA). Dr. Ali Akbar Murad, an officiof the Bahrain Health Ministry, left here for Rome after a three-day visit to Jordan. Praising what he described as the high standard of health services in Jordan, Dr. Murad who is a cardiologist himself, said a large number of Bahraini heart patients go to Al Hussein Medical Centre for treatment, Dr. Murad will represent his country at a cardiologists conference opening in Rome tomorrow.

#### Austrian tourism official arrives

AMMAN, April 11 (JNA). -The director of tourism in Salzburg, Austria, arrived here this evening on a week-long visit to Jordan at the invitation of the Ministry of Tourism and iities. He will hold talks with ministry officials on Jordanian-Austrian touristic cooperation, particularly in the fi-eld of training.

## LOCAL **EXCHANGE RATES**

Buying/Selling 306,00/308.00 574.00/578.00 U.K. sterling W. German mark 152 40/153.30 Swiss franc 165,00/166,00 French franc 67.30/67.70 Italian lire (for 36,00/36.20 every 100) Japanese yen (for every 100) 139,20/140.00 142,80/143.70 Dutch guilder Belgian franc (for

every ten)

Swedish crown

Jordanian fils

97.60/98.20

67,10/67.50

# Arab Potash Co. financiers gathering hears favourable feasibility

ns a year) is reached in 1984.

Representatives of Alexand-

er Gibb and Parmers, who are

responsible for the civil works

construction then described the technical problems of extr-

acting potash from the brine

of the Dead Sea. Despite ext-

remely soft mud, the remote-

ness of the site, and the inhos-pitable climate, the engineers declared their experimental pr-

ojects successful and presen-

ted their designs for building

ten kms, of canal, 10,000 hec-

tares of evaporation pans, and a township to house 3,000 peo-

Eastern markets

main market for potash will

be in the east -- notably in

India and Japan. In these ar-

It is expected that Jordan's

By a Jordan Times staff reporter

AMMAN, April 11 - The Arab Potash Company (APC) Financiers Conference opened this morning at the King Hussein Youth City with a smooth presentation of Jordan's biggest ever industrial project.

Welcoming delegates from major international funding ag-encies, Mr. Ali Khasawneh, Chairman of APC, spoke of the "great national hope" that is attached to the \$422 million potash project, and of the so-cial and economic revolution that it would bring about in the country.
"The project will sharply im-

prove Jordan's balance of tra-de" Mr. J.D. Beuhler, Vice President of Jacobs Engineering Co., APC's main consultants, announced at the start of a film and slide show, describing the development of the project. Potash exports are calculated to improve Jordan's balance of trade figure by \$84 million (in 1977 currency) a year, when full production (1.2 million to-

eas APC would be able to maintain a competitive edge over their major competitors from Canada, the final feasibility report declares.

The company is expecting

per cent. One hundred and sixty eight million dollars of APC's capital is to be in equity. It hopes to raiso as much of the rest as possible m the form of soft loans. So far the company has raised a capital of JD 40 million.

Tomorrow delegates to the conference will be given a guided tour of the potash site on the southern side of the Dead Sea. During the concluding session on Thursday discussion will focus on financing arrangements for the scheme. And the last item on the agenda is to fix a date for the pledging conference when it will finally be known how successful Jordan has been in selling its scheme to the world's major development financiers, Representatives of the World Bank, the Arab Fund for Economic and Social Development, the Islamic Development Bank and the Libyan government were among those invited to hear the feasibility report on Jordan's pota-

sh project.

## Amman Stock Exchange Report

an "attractive" 17.8 per cent

financial return on investment,

				price
	D 5.000	660	6.600	6.600
Jordan Cement Factories J.	D 10.000	298	14.900	14.900
*Jordan - Gulf Bank	D I.000	2,214	1.100	1.100
	D 1.000	700	1.650	1.650
Arab International Hotels Co J	D 1.000	32	0.650	0.650
Jordan Tobacco and Cigarette Co J	D 5.000	1,346	7.400	7.400
•	D 1.000	950	0.950	0.950
Jordan Textiles Factories J	D 1.000	85	0.850	0.850
National Maritime Co J	D 10.000	1,650	_	10.500

\*50 per cent of share capital paid. \*\*75 per cent of share capital paid. UNDER THE ROYAL PATRONAGE OF HIS MAJESTY KING HUSSEIN The Al Hussein Society for Child Welfare In generous cooperation with **PRESENTS** 

For the first time in Jordan තුගල ෙන තුරගල Palace of Culture, Hussein Youth City NOTE CHANGE OF DATE Saturday 5th April TICKETS AVAILABLE AT Amman Sport - 5babsough Street Sweet Supermarket - 5th Circle Firas Booshop - Jabal Armas University Bookshop — Jabaj Lu on Grocery — Jahal Hussein

College Pharmacy — 1st Circle

Silver Market — 5th Circle

All proceeds will go towards establish 'a home and vocational centre fo

#### **FURNISHED HOUSE FOR RENT**

A flat consisting of two bedrooms, living room, dining room, kitchen, bathroom, and a verandah is available. Centrally heated, first class furniture.

ocation: Jabel Amman, 4th Circle, behind the Japanese embassy.

Please call tel. 51190 - 44925.

#### WANTED

Unfurnished house in Jabal Amman or Shmeisani with three or four bedrooms, central heating. telephone, small garden, starting from June 1, 1978.

Please contact: Mr. Zietlow, Ministry of Transport, tel. office 41461, home 42973, after 3:00 p.m.

#### PRIVATE LESSONS

For private lessons in Arabic and French. Please call tel. 62537.

09:30 09:45 10:00 10:30 11:00

# TIMES

**BBC RADIO** 

05:00 News; 24 Hours
05:30 Sarah Ward
05:45 World Today
06:00 News; Presa Review
06:30 Jazz for the Asking
07:30 Sarah Ward
07:35 Report on Religion
08:15 World Radio Club
08:30 Terry Wogan
08:10 World Radio Club
08:30 Terry Wogan
08:00 News; Press Review
08:15 World Today
08:35 Paperbacks
10:00 Talkabout
10:20 How to be a Musicia tin World Today News; Book Choice News; News abo tain Radio Newsreel 18:30 Top Twenty 19:00 Outlook; News 19:39 Stock Market Report 19:45 Golan Treasury 20:00 News; 24 Hours 20:30 News; 24 Hours
20:30 Meet the Composer
21:30 Report on Religion
21:35 Soccer Special
21:30 Alexis Korner
22:00 News; World Today
22:25 Financial News
22:35 Book Choice; Reflecti-10:00 Talkaboot
10:30 How to be a Musician
11:30 News, News about Britain
11:15 Young Britain
11:30 Farming World
12:90 Radio Newsred
12:15 Take it or Leave it
12:45 Sports Round-up
13:00 News; 24 Hours
13:30 World Radio Clob
13:45 A Jolly Good Show
14:30 The Blood

**VOICE OF AMERICA** 

20:15

#### AMMAN AIRPORT

Arrivals: Departures: Artivals:
7:50 Cairo (EA)
7:55 Cairo (EA)
7:55 Dishran, Kuwak
8:10 Dhahran, Kuwak
8:10 Dhahran (AZ)
8:25 Muscat, Doha (RJ-GF)
9:00 Jeddah
9:50 Aqaba
10:35 Larmaca (CY)
11:15 Beirut
11:20 Kuwak (KAC)
16:50 Jeddah (SDI)
17:15 Amsterdam, Geneva
18:45 Cairo
20:00 Beirut (MEA)
20:30 Benghazi, Athens
12:15 Frankfurt, Musich, Damasun (LII) 8:00 Aquba 8:45 Beirut (MEA) 8:55 Cairo (EA) 9:00 Beirut 10:15 Athens A (KLM) 11:20 11:30 11:30 16:50 17:15 12:00 London 12:30 Kuwalt (KAC) Auwar (KAC)
Cairo
Jeddah (SDI)
Abu Dhahi, Dubai (RJ-GF)
Kuwait, Dhahran
Rawalpindi (BA)
Dhahran (AZ) 13:00 18:15 20:00

#### **CULTURAL CENTRES (Amman)**

American Centre	TeL	41520
British Council	•	36147-8
French Cultural Centre		37009
Gosthe Institute	-	41993
Soviet Cultural Castre	-	4420B
Raya Arts Centre	4	65195
Hussein Youth City		39341
Y.W.C.A	-	41793
Y.WMA	A	64251
Amman Municipal Library	•	36111
University of Jordan Library	44	65111
Citadel Museum	-	38191
Folkiore Museum	-	36191

#### USEFUL TELEPHONE NUMBERS (Amman)

22090 ordan Electric Power Co. (emergency) ... 36381-2 37111-3 Police beadquarters .... 39141 Najdeh roving patrol rescue police, (English spoken) 24 hours a day for emergency help 21111, 37777 Jordan Television ...

#### CULTURAL CENTRES (Damascus)

Al Sha'b Art Gallery 228-527 American Centre ... Arab Cultural Contro 333-727 \$32-832 330-694 222-016 Soviet Cultural Centre Snanich Cultural Castro 334-003

#### USEFUL TELEPHONE NUMBERS

(Damasens)		
Ambulance (government)	Tel.	98
Chamber of Commerce	77	118-339
CARCING POWER Co. (repair)	-	223-687
FUT headquarters		91
INSOLUTION	-	96/97
Miniscipal water service	-	113-500
Time (in Arabic)	-	29

# Bank of Japan World Bank may be weary intervening

GENEVA, April 11 (R). — Japan's External Economic Affairs Minister Nobuhiko Ushiba said here yesterday he thought the Bank of Japan would no longer intervene on a large scale on the foreign exchange market to check the yen's rise against the dollar.

economic

was his personal feeling, not the stated policy of the bank. And he made it clear that he expected some improvement in the dollar's position soon.

Mr. Ushiba was answering questions at a press conference during his visit here for talks connected with current negotiations aimed at freeing world trade from restrictions.

He said the 98-nation negotiations, aimed at setting wor-ld trade rules in the 1980's by dismantling tariffs and other barriers, had been made more difficult by the decline of the dollar. If the dollar's fall continued, he said, it would create a very unsettled situation as governments would be reluct-

But he stressed that this ant to commit themselves to long-term decisions unless they were sure there would be no wide fluctuations in exchange

rates. Mr. Ushiba said Japan still envisaged completing substantive bargaining by the end of July in the trade negotiations. being conducted under the auspices of the General Agreement on Tariffs and Trade (GATT), and he did not believe the dollar would continue to fall in value by that time.

Mr. Ushiba said that U.S. Chief Trade Negotiator Robert S. Strauss seemed confident that the U.S. administration's energy bill would be passed and this would also favourab-

# head visits Turkey

ANKARA, April 11 (R). — World Bank President Robert McNamara began meetings with Turkish government leaders here yesterday to discuss the bank's possible financial contribution to development pro-

Mr. McNamara said on arrival Sunday night, that he knew the Turkish economy had problems but the world bank was ready to help Turkey over-

come them A World Bank delegation arrived last week to review Tur-key's economic situation and the projects offered by the government

Mr. McNamara will meet Prime Minister Bulent Ecevit before talks open between Turkish officials and the World Bank delegation.

Finance Ministry officials said Turkey was seeking World Bank credits for a number of projects including the construction of a dam and a power plant, development of forestry and animal husbandry, and the extension of an iron and steel mill.

countries held an initial round

of talks here at the end of

last month to prepare for the summit, which will bring U.S.

President Jimmy Carter to

West Germany for the first

time since he took office.

## Major non-communist nations to Officials of the participating

hold a summit conference here on July 16 and 17, it was offi-A joint statement by the seven participating governments

said the main topics for dis-cussion would include the fight against inflation, energy, trade, international currency questions, and cooperation between industrialised and developing countries.

BONN, April 11 (R). - Le-

aders of the world's seven ma-

ior non-communist nations will

cially announced yesterday.

The meeting will be attended by the leaders of the United States, West Germany, France, Britain, Italy, Canada and Japan.

The nine-member European Economic Community (EEC) will be represented at discussions of subjects which concern it by West German Chancellor Helmut Schmidt, who will then be Chairman of the EEC's Council of Ministers, and by Mr. Roy Jenkins, President of the Common Market Commission, the statement added. The joint statement added that the summit would give the

seven governments a chance to examine the world economic situation and work out whatever national or international measures were necessary to

The world was faced by serious and linked economic problems, whose solution made joint action on various fronts necessary, it said.

## **Gulf Helicopters** gets Kuwaiti loan

Kuwait, April 11 (R). The Kuwait International Investment Company (KIIC) is arranging a \$5 million syndicated loan for Gulf Helicopters, a wholly-owned subsidiary of the Bahrainbased Gulf Air, KIIC said

here today. The seven-year loan is at 1-1/8 per cent above London inter-bank offered rates,

# Saudi Arabia to open 1st car assembly plant

JEDDAH, Saudi Arabia, April 11 (R). - King Khaled Ibn Abdul Aziz of Saudi Arabia will open his country's first car assembly plant in Jeddah on Wednesday, it was announced here yesterday.

Called the National Automobile Industries, the new Mercedes truck plant is 70 per cent owned by Mr. Ahmad Juffali, a prominent Saudi Arabian businessman, and 30 per cent by the West German firm Daimler-Benz.

The 130-million rial (\$40 million) plant will turn out 6,500 units a year, according to Dr. Gernot Moerner, the General Manager of the National Automobile Industries.

## Conservative budget proposed for Canada

Despite the prospect of a June election, Canadian Finance Minister Jean Chretien last night proposed a conservative budget of \$46.9 billion, increasing government spending only slightly and giving small

tax relief. Mr. Chretien told parliament that although an early election was expected: "I have refused to make irresponsible promises to the people of Canada because I respect the intelligence of those who will be choosing the next govern-

clearly aimed at restoring confidence in the Canadian dollar, trading at a 45-year low of just over 87.5 U.S. cents. The budget proposals called neither for government spending or job creation program-

Mr. Chretien's speech was

-- a surprise with a re-

income tax cuts, which had been widely expected.

come in retail sales tax cuts of up to three per cent, reducing prices by \$1.1 billion.
Progressive Conservative

ter Pierre Trudeau announces a mid-June election date this week, parliament will be dissolved without debating the

OTTAWA, April II (R). - cord one-million-plus Canadians out of work -- nor for

The projected \$46.9 billion budget for the year ending next March 31 compares with an estimated \$43 billion for the year just ended. The major tax relief would

Sinclair Stevens, speaking for the major opposition party, immediately denounced the proposals as inadequate -not "half enough to trigger the economy into the exciting growth Canada deserves." as expected, Prime Minis-

budget proposals.

MAJOR LEAGUE BASEBALL

## Rangers take victory over Yankees Angeles third baseman Ron

Darrel Chaney's two-run

homer with two out in the

tory over the San Diego Pad-

ta's first of the season and

snapped a three-game losing

Mike Tyson drove in four

runs, three with a home run

which capped a six-run burst

in the first inning, and helped

NATIONAL LEAGUE

The victory was Atlan-

res.

EAST

California

Minnesota

Monday's games: Cleveland 5, Boston 4

Texas 5, New York 2

Kansas City 4, Baltimore 2

Oakland I Seattle 0 California 3, Minnesota 0

Oakland

Chicago

Texas

NEW YORK, April 11 (AP).

— The Texas Rangers jumped on old nemesis Dick Tidrow for six hits, including Richie Zisk's two-run homer, and rode the five-hit pitching of Dock Ellis and Roger Moret to a 5-2 victory over the New York Yankees Monday

The Rangers, who were 0-7 against Tidrow, ambushed him for three quick first-inning runs in the game at Arlington. Toby Harrah ripped a run-scoring double and Claudell Washington lashed a two-run single to get the Rangers off winging.

With 14,299 fans braving 10-degree Celsius weather on "beat the Yankee hankee nitwo off-season acquisitght," ions combined to chase Tidrow in the sixth inning.

Al Oliver, who came to Texas from Pittsburgh, doubled down the left field line with two out and trotted home ahead of Zisk's second homer of the season-opening, threegame series.

Ellis went five innings before his arm tightened in the cold. He yielded only one hit and an unearned run.

In other American League action, Al Cowens drove in three runs with a pair of triples giving Kansas City a 4-2 victory over the Orioles in the Royals' home opener.

Ron Pruitt singled in the winning run with one out in the last of the ninth as the Cleveland Indians nipped the Boston Red Sox 5-4. Andre Thornton had a three-run homer in the third, helping the Indians build an early 4-0

In the National League, Los

Cey tagged Houston's Floyd Pirates 11-2 in a rain-delayed Bannister for a solo home

Cardinals' home opener. Craig Swan pitched a five. run and run-scoring single hitter and Steve and Ken and veteran Doug Rau con-Henderson each drove in thr. tinued his mastery over the ee runs, leading the New York Astros for a 5-2 Dodger vic-Mets to a 6-0 victory over the

Chicago Cubs. In late American League ganinth inning gave the Atlanta. Braves an 8-7 comeback vicmes on the West Coast, Don Baylor's two-run homer in the seventh inning broke up a scoreless game and carried the California Angels to a 3-0 victory over the Minneson Twins and John Johnson and Dave Heaverlo combined on a three-hitter to lead the Oakland A's past the Seattle Mariners 1-0.

#### New York .500 .500 .250 .250 Philadelphia Pittsburgh 1 1/2 2 1/2 St. Louis Chicago WEST 1.000 1.000 .667 .250 Cincinnati Los Angeles San Francisco Atlanta San Diego Houston New York 6, Chicago 6 St. Louis 11, Pittsburgh 2 Atlanta 8, San Diego 7 Los Angeles 5, Houston 2 **AMERICAN LEAGUE** 1.000 Milwaukee .667 .667 .333 .333 Cleveland Detroit New York Boston WEST

Basebali standings and results after Monday's games

## FOREIGN EXCHANGE RATES LONDON MARKET REPORT

LONDON, (R). - Following are the buying and selling rates for leading world currencies against the dollar at the close of interbank trading on the London foreign exchange market last night. Tourist rates will differ from those quoted helow. U.S. dollars

One sterling .... 1,8775/90 One dollar ....

2.0125/35 2.1470/90 1.8575/95 31.32/35 4.5475/95 219.10/20 4.5600/15 5.5445/60

5.2980/90

Dutch guilders Swiss francs Belgian francs French francs 850.90/851.20 Italian lire Japanese ven Swedish crowns Norwegian crowns Danish crowns.

West German marks

The market closed on Tuesday quietly mixed, awaiting the British budget proposals, dealers said. At 15:00 the F.T. index was up 2.8 at 466.1

Equities met some speculative interest ahead of the budgetary measures, but government bonds were defensively marked down. U.S. stocks and Canadian issues gained parrowly.

Glaxo closed 9p higher at 525p after further consideration of Monday's 1977 results, while Rio Tinto Zinc ended 4p higher at 195 on results above market expectations.

# 2000











Our fine products made by experienced Finnish craftsmen include the following: Furniture for the home and office. Ceramic dishes and tableware. Handcrafted jewelry. 3rd CIRCLE, JABAL ANMAN, IERT TO NEW DISURANCE BLDG., TEL. 420





TEL.65693 - 65778



























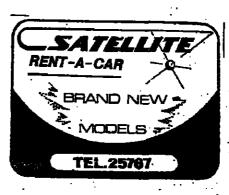


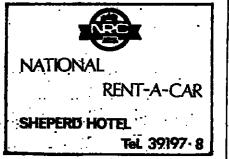






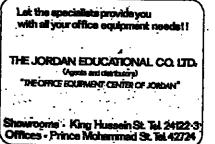




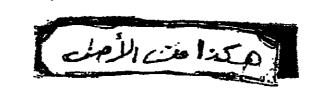


.667 .667 .667 .500









FORECAST FOR WEDNESDAY, APRIL 12, 1978

The Lorent the CARROLL RIGHTER INSTITUTE

GENERAL TENDENCIES: An excellent time to make constructive plans of action by which you can add to your the large state of the days ahead. Solve whatever problems that come up with intelligence. Obtain the data you need.

ARIES (Mar. 21 to Apr. 19) Ideal day to confer with advancement. Don't neglect correspondence. TAURUS (Apr. 20 to May 20) You have good ideas for

TAURUS (saper abundance but you have to be more pusinesslike to get good results. Relax tomoht. GEMINI (May 21 to June 21) A day when you can

PCI sasily out across your views and new ideas to others. Show increased devotion to loved one. MOON CHILDREN (June 22 to July 21) Find the right

way to gain your aims early in the day. Go to the right sources for the information you need. LEO (July 22 to Aug. 21) Contact new and old friends with whom you want to have more dealings in the future.

Make the evening a most enjoyable one. VIRGO (Aug. 22 to Sept. 22) Talking with higher-ups in now can do much to help you advance in career matters. & Be more interested in civic affairs.

LIBRA (Sept. 23 to Oct. 22) You have new ideas that need work on them now if they are to be successful. Secrets come to light by delving into them now.

SCORPIO (Oct. 23 to Nov. 21) Be sure not to overlook any responsibilites you are commmitted to. Increased happiness can be yours with the one you love.

SAGITARIUS (Nov. 22 to Dec. 21) Serious talks with financial experts can bring excellent results at this time. Use extreme care in motion tonight.

CAPRICORN (Dec. 22 to Jan. 20) Schedulé your work so that you can accomplish the maximum in the minimum M of time. Be clever in a business dealing.

AQUARIUS (Jan. 21 to Feb. 19) Good day to enjoy the finest amusements you can think of in the company of congenials. Be careful of strangers today.

PISCES (Feb. 20 to Mar. 20) Take time to study a new project that could be quite remunerative for you in the future. Handle business matters wisely.

و الجويد ؛ جميدة أ يُتنب و الأنواد و الجويد و التواد و التواد و التواد و

RESTAURANT TAIWAN TOURISMO

oriental cuisine and authentic northern Chinese and 0 elites?

Cantonese dishes.

TAKE OUT ORDERS AVAILABLE

GRAFFITI

Jabal Amman First Circle tel.

25592 announces good news to our customers.

We have now famous Leba-

nese cooks and staff and we are ready to offer Lebanese

specialities as well as oriental and European cuisine at the most reasonable prices.

CHINESE RESTAURANT

First Chinese restaurant in

First Circle, Jahal Amman, #

to midnight.

by phone.

lordan's largest and most

Renowned Chinese restaurant

to the Far East via superior

offers you a gourmet's trip

3rd Circle, Jabai Am

We would like you

to join us

for the Daily Dish.

'Arabic & European'

dishes. At

UICK EAL Restaurants for broasted

Take home, lunch or dinger

label Amman, First Circle. fel, 21083, Jabai Al Luweik-

Jeh, Hawuz Circle. Tel. 30646 labal Al Hussein, near Jeru-

salem Cinema. Tel. 21781.

어마 바라의

STEAKHOUSE

la carte

Fires Wings Potel, Jabel (A) Liwelbdeh. Tel. 22103/4. Choice of THREE set me-/ views daily for lunch, and a

Open 12-3 p.m. and 7-12

Also in Zarka and Irbed.

thicken and light snacks.

O HOTEL

Telephone 41983

# World waits with baited breath in countdown to biggest ever weather project

By Pat Burns

GENEVA (WFS) - Thousands of scientists from virtually every country in the world are gearing up for what the World Meteorological Organisation (WMO) claims is the largest and most complex scientific undertaking of its kind ever attempted.

It is the Global Weather Experiment, a year-long information gathering process that will directly involve nearly every professional weather forecaster in the 147 WMO member countries.

twelve months from December 1 1978, a vast array of atmospheric and ocean-

By David Henry

OTTAWA (FT). — Delega-tes to the U.N. sponsored In-ternational Water Conference called for billions of dollars in

aid to provide "water for all"

by 1990. The need is great, es-

pecially in the rural areas of developing countries, no doubt of that. But too much enthu-

siasm could be as damaging as

A brief look at the experien-

ce with large-scale rural water

supply programmes in the last

10 years does not inspire con-

fidence. In one Asian country,

for example, about 50,000 wells were drilled in hard rock, dro-

ught-prone regions at a cost of about \$40m. They were intend-

ed to bring water to some 40m

people, but today an estimated

80 per cent of the wells are

no longer producing water. In East and West Africa the same

story is repeated, with some

countries reporting failure rates of up to 90 per cent.

Out of date machinery

What is wrong? If you ask

a villager he will likely show

you a rusty piece of machinery

sitting on top of a pipe in the

too little.

ic observations will flood into receiving stations and data processing centres all over the world. Every day basic centres all over

generated from hundreds of meteorological balloons, buoys and special research aircraft

A 12-month exercise involving scientists in nearly 150 countries should revolutionise weather forecasting from next year.

pear an exercise in superlatibut the meteorologists who have been planning it at WMO's Geneva headquarters have nevertheless had to compromise because of expense. It is impossible to put a single sum on the cost of the experiment since each national weather forecasting organi-

part of the experiment. But if there had been unlimited money, the scientists would have preferred to have 200 instead of nine of the fixed ocean ships, each of which has an annual operating cost of \$2 million.

"A compromise is necessa ry between what is scientifically desirable, what is technologically feasible and what is economically attainable",

way between the International Development Research Council and five developing countries already engaged in pump development. The aim is to organise a five-year multi-country testing programme that will feed the actual field experience back into the design exercise. In this way further modifications can be incorporated

It is a lengthy process, but it will be worth it. Because the end product will be a hand pump that will provide a positive answer to the three practical questions of the village: Will it work, will it last, can I afford it?

-- Financial Times News-Features

The most tangible result of all this activity should be accurate worldwide weather forecasts for periods of 10 days ahead or more by the mid-

At the moment there is still a large degree of human interpretation based on a forecaster's personal experience in the meteorological business. And, despite the WMO's own long-established World Weather Watch system for global forecasting, accurate weather predictions are still limited mainly to individual locations in which a high level of experience has been built up in a particular weather forecasting organisation.

Computers do play a big part in weather forecasting today, but the basic tools the computer works with are outdated and suspect, hence the continuing dependence on the forecasters personal experien-

#### "Models"

The basic tools of a westher forecasting computer are "models", or mathematical equations which represent the average behaviour of the weather based on previous observation. This sort of numerical weather prediction was first devised by a British me-teorologist, L.F. Richardson, 60 years ago, although for 25 years it was impractical because of the large number of calculations necessary to arrive at the basic equations or

that an army of 64,000 leading mathematicians working for a year round the clock would be necessary to process all the meteorological observations into neat "models".

Today, however, computers can do work in seconds. But the data on which today's "models" are based is notoriously inaccurate. The Global Weather Experiment will replace those inaccurate "models" with the most precise data possible under modern condi-

At the same time as the Global Weather Experiment is taking place, a special monsoon experiment will occupy scientists in the Bay of Bengal and the Arabian Sea, During the coming winter and the summer of 1979, an expected six Soviet and Indian ships will concentrate on meteorological observations of particular significance in the formation of the monsoon.

Giobal telecommunications will also be under test during the 12-month period since scientists want to start work on the data as quickly as nos-sible, not just because of a natural feeling of impatience after 10 years of waiting, but also because the extra information will help improve wo-

rldwide forecasting from 1979. The main data processing centres will be in the USA. USSR, Japan, U.K. and at the WMO's Geneva headquarters. But numerous radio and satelite receiving stations will play a vital role in transmitting that data to the computer centres, where the work will really begin.

#### Moonlighting gets out of

"models". One estimate was

By Jack Gee

PARIS (F.T.) - Few Parisians who pass an elegant six-sto-rey office block a stone's throw from the Champs Elysees know its shameful secret: it was built illegally by uninsured workers who were not declared to the authorities by a boss who never paid

centime in taxes.
"The lump" or "moonlighting" -- the use of undeclared labour -- has become a scourge in France, a country with m. unemployed but with one worker in ten now deriving a sizeable slice of his in-

come from this source. Employers complain that their prices are being undercut by this form of unfair competition. The jobless that the prevalence of "hump" makes it impossible for them to obtain registered employment.

Earnings from the "lump" are estimated at seven billion

francs a year. But during the past 12 months the French courts have convicted only eleven people for indulging in this forbidden activity. Sentences imposed by the penal code range from a fine of between 600 and 2,000 francs and jail terms of from ten days to one month.

For the building industry in the Paris area work performance by moonlighters is reckoned as equivalent to 4,500 full-time jobs a year with a turnover of 40 billion francs. Taxes evaded add up to 150 million francs and unpaid social; security contributions to 250 million francs

#### Out of hand

Gerard Longhy, President for the Paris Building Federation's Anti-Lump Committee, says: "When our order books were full, this form of unfair competition was not too serious. But we ought to have reacted sooner.

"Now the crisis has got completely out of hand. Sales of paving tiles have increased by 20 per cent over the past two years, but more and more building firms have gone bankrupt. What happens to the tiles? They are being used by lump workers. It's the same with the booming sales of cement".

Longhy holds the state responsible. He says: "By underpaying its civil servants and putting them on short time the government encourages people to take on extra work in order to make ends meet.
"Heavy value-added tax on maintenance tasks like painting, plumbing and electricity

holder to look for undeclared labour." Jean-Claude Martini, a professional carpet-layer, says: The authorities could put an end to moonlighting by ob-liging suppliers of building materials to sell only to re-gistered artisans, instead of

offering trade discounts to any

are an incentive to the house-

But Martini admits that he often hires unskilled personnel to lay his carpets. He says: "I pay them less than the official hourly wage. But they don't have to pay income tax and I don't have to declare the VAT or social security dues which I owe".

Seasonal farm work, accountancy, secretarial services and gardening are notorious for the proportion of "lump" labour involved.

The garment industry ranks with building among the major offenders. Ljuba Susac, a 37-year old Yugoslav-born manufacturer who has been in business in France for the past 10 years, says: "At least 40 per cent of the work done in the Sentier rag trade area

of Paris is not declared."

Susac adds: "This applies not only to the labour force but to the purchase of the cloth in Belgium or Italy and to the sale of finished gar-

Manufacturers make a widespread practice of lending sewing machines to housewives who, uninsured and undeclared, work 14 hours a day in their own homes and earn up to 1,800 francs a month. The French police estimate that 300 Paris garment firms are using "lump" labour and that 10 per cent of the output for the whole of France is produced in this manner.

Jean Hardy, a Parls suburbanite, takes up the cudgels on behalf of the moonlighters. Hardy says: "No building firm would agree to clear the rub-bish from the site on which our house was built. They said the gate was too narrow for a buildozer to get through. One gave us a tentative esti-mate of 10,000 francs as the lowest charge for the job. Finally it was done by a city parks employee in his spare time for 2,000 francs.

"Lump" workers are recruited for many walks of life including students, senior executives and members of the liberal professions as well as the unemployed. Few are prepared to accept the argument that they are devaluing their own work and that of mem-bers of their profession. Secretary of State for Man-

ual Labour Lionel Stoleru accepts that it is going to be an uphill struggle to change the Frenchman's attitude to "lump". He says: "It is difficult to abolish this practice, which is a problem both for the state and for the conscience of every Frenchman. But we must condemn this lack of civic spirit." -- Financial Times

News-Features



meteorological measurements will be taken by 10,000 land stations, 7,400 merchant ships, nine fixed ocean weather ships, numerous reconnaissanobservation periods. The experiment might ap-

In addition, an even great-er flow of information will be

Hand pumps used in villages have to stand up to

between five and nine million strokes a year --

and they break down. Their basic design has hard-

ly been improved in a hundred years. A team of

scientists is now trying to design a pump that will

be really reliable, tough and cheap.

ce and commercial aircraft (supplying an average 3,000 reports daily), five geostationary satellites and a number of satellites orbiting above the

ce of machinery -- and he is

the situation: managerial, fin-

ancial and sociological. But un-

til there is some improvement in the technology these prob-

lems will be very difficult to

deal with. The present situa-

tion is like trying to design a public transit system where the

choice of technology is limited to 1920 Ford Model Ts.

What is badly needed then is a better hand pump. And a

group of scientists at the Uni-

versity of Waterloo in Canada

are hoping that they have it, Wi-

th the support of a grant from

the International Development

Research Centre, the Waterloo

team -- composed of senior

members of the engineering fa-

culty with backgrounds in phy-

sics, fluidics and mechanical en-

gineering - has been working

on the problem since the beg-

inning of the year.

There are other aspects of

Scientists search for hand pump to hardwoods. They reasoned that plastic injection moulding co-uld dramatically reduce manufacturing costs, and many developing countries already have the basic injection moulding capacity to produce compon-

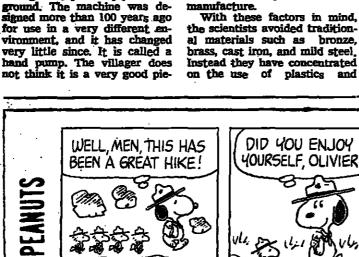
> Bearings are one of the major problems with existing pumps. Yet the bullock carts of India, which carry more freight each day than the Indian railways, run on wooden bearings. The North American petro-chemical industry also imports African hardwoods for use in the manufacture of high stress bearings\_

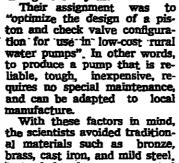
#### Second phase

Much of the research on the applicability of local hardwoods for bearings will be carried out by scientists in the developing countries. Now that the Waterloo team has selected the best prototypes from the different designs they produced in the laboratory, the project will move into its second phase: extensive field testing and research.

The most promising proto-types are capable of being adapted to high, medium and low lift, and can be manufactured in four sizes, from one and a half to three inches in diameter. This flexibility in design will allow the pumps to meet the wide variations in local conditions that they will encounter in actual use.

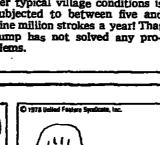
Testing in the village is essential. Another research group recently tested a modified pump in the laboratory by operating it for one million strokes. Later, someone doing research at the village level discovered that a hand pump under typical village conditions is subjected to between five and nine million strokes a year! That pump has not solved any pro-





DID YOU ENJOY

YOURSELF, OLIVIER?





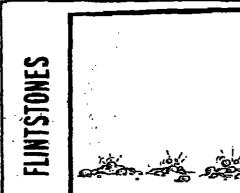


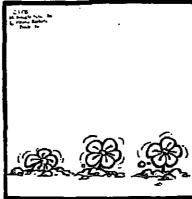
















p.m. Specialty: steaks. For advertising in above columns contact "Sout Wa Soura" Tel. 38869. Open from 9 a.m. to I p.m. and 4-6 p.m.

Former top FBI officials

embroil agency in scandal

WASHINGTON, April 11 (R). a federal grand jury yesterday --- The Federal Bureau of In- with conspiring a deprive re-

their mail.

vestigation (FBI) was embroil-

ed in the worst scandal in its

history today after three for-

mer top officials were charged with approving burglaries.

Patrick Gray, who resigned

in disgrace as acting director

of the FBI five years ago, is

the first person to have occu-

pied the director's office to

He and two former subor-

dinates charged with him --Mark Felt and Edward Miller

- could face 10 years in pri-

Mr. Felt was acting asso-

ciate director and Mr. Miller

was assistant director with

responsibility for domestic se-

They were charged with authorising a large secret te-

am of agents in the New York

area known as Squad 47, whi-

ch carried out burglaries and

wiretaps against the radical Weather Underground group

and suspected sympathisers in

The three were charged by

son and \$10,000 fines if they

are convicted.

curity operations.

the early 1970's.

be charged with a crime.

# Rhodesian cabinet rejects Anglo-U.S. call for talks with natoinalists black

SALISBURY, April 11 (R). - Rhodesia's interim government has rejected an Anglo-American call to sit down and discuss the future of the country with black nationalist guerrillas. But the multi-racial interim government, set up to implement an internal settlement in Rhodesia, said it would welcome a visit here by British Foreign Secretary David Owen and United States Secretary of State Cyrus Vance.

Dr. Owen and Mr. Vance are expected to go to Tanzania this week for talks with guerrilla leaders Joshua Nkomo and Robert Mugabe who have re-

jected the internal settlement. The interim government sta-tement last night followed four hours of talks between its representatives and Mr. John Graham of the British foreign office and Mr. Stephen Low, U.S. Ambassador to Zambia.

The Anglo-American envoys tried unsuccessfully to persuade the interim government to take part in an all-party conference with the leaders of the

MANILA, Philippines April 11 (AP). — President Ferdin-and E. Marcos ordered tonight

the release of more than 500

persons detained for participa-

ting in a peaceful march Sun-

day protesting the "death of

freedom and democracy" in the

Philippines, an official announ-

order, however, were former

Senator Lorenzo Tanada, 76,

one of the Philippines' most

respected lawyers and campa-

ign manager of the opposition

People's Power Party in last Friday's elections, and six oth-

er party members including four candidates, the presidenti-

Tanada and the six others, in-

cluding candidates Francisco

Rodrigo, also a former senat-

or, Teopisto Guingona, Ernesto Rondon and Aquilino Pimentel,

were the leaders and organis-

ers of Sunday's march. It said

the participants "openly advo-

cated the use of violence aga-

Marcos' decision was in ac-

inst the government."

The announcement said Mr.

Excluded from the release

cement said.

al palace said.

Marcos

The interim government is led by a partnership of white Premier Ian Smith and moderate black leaders Bishop Abel Muzorewa, Reverend Ndabaningi Sithole and Chief Jeremiah Chirau.

Its statement said the interim government was not in favour of participating in such a conference.

"However, if Dr. Owen and Mr. Vance would like to have detailed discussions with the Executive Council they will be most welcome to come to Salis-

release

orders

Patriotic Front guerrilia alli- bury next week," the statement said.

The strength of the invitation was seen by political observers here as an indication of the determination of the interim government to have its internal settlement proposals recognised internationally.

But in rejecting the proposed all-party conference, the interim government appeared to be equally determined not to resurrect arguments over the future of Rhodesia that it bewere covered in full during the months preceding the formation of the multiracial regime.

# aerospace education

the full implication of their participation in the march." Charges of illegal assembly and inciting to rebellion had earlier been filed before a military court against all of them but today's announcement said Marcos indicated the charges

ed to a civil court. It was not known when the prisoners would be released. Mr. Marcos ordered the release of six nuns and a priest yesterday although the authorities said their release did not mean the charges against them had

been dropped. The march, in which participants carried two mock coffins containing what they said were the 'remains of freedom and democracy" as they said the rosary and interpersed the prayer with some patriotic songs, was organised to protest alleged widespread fraud and terrocordance with "a national po- rism during Friday's voting.

of 500 detained persons licy of conciliation to bring together all the various factions in society," the announcement said. It described most of thoconference se arrested as first offenders "who probably did not know

WASHINGTON, April 11 - (AP). — The first International Conference on Aerospace Education will be held in Cairo, Egypt in October 1979, a conference organiser said here yesterday. Kamal Naguib, an Egypmight subsequently be referr-

tian who is provisional cha-irman of the newly organised International Aerospace Education Organisation, said the date and location of the first international conference was decided at the American National Congress on Aerospace Education last week in Dallas, Texas,

He said all countries will be invited to participate. Permanent officers and a charter for the International Aerospace Education Organisation will be decided at the Cairo conference,

# Gone are the days of London's killer fogs

By Michael West

LONDON (AP). — The days are over when London's infamous "pea-soupers" swirled yellow and oily through city streets. Officials hail the disappearance of the killer fogs as a major environmental vic-

By banning the burning of coal in home hearths and In factories, the city government underwrote a costly campaign to convert its energy sources to smokeless fuels such as gas, electricity and

Now, 22 years after parliament passed the Clean Air Act ordering "smoke control areas" in the city and its out-skirts, the benefits are plainly visible. For one thing, Londoners can see farther -- average visibility was improved from one and a half miles to four miles in winter -- and residents now get 70 per cent. more sunshine during the cold

As white as snow

The London Zoo says its polar bears are almost as white as in the Arctic wild instead of turning a dirty grey colour from the smog. Plants and wildlife also are thriving in the sunnier atmosphere. "Some areas of London now are as clean as many rural areas," said a spokesman for the government's Department of the Environment.

First accounts of pea-soupers plaguing London in the winter date back to 1273 when coal burning was banned as being "prejudicial to health." In 1305, a Londoner was executed for violating the ban,

Even Queen Elizabeth I was annoved with the taste and smoke of the coal, official records show. The fogs provided

the 19th century for the fictional prowlings of Sherlock Holmes and the real crimes of Jack the Ripper.

In 1952, an estimated 4,000 persons died in London's worst fog on record and in 1962 an estimated 2,800 were kil-

Some fog victims simply dropped dead in the streets. their lungs stilled by the dense, murky mix of smoke, coal-based chemicals and thick mist. Bronchitis killed the re-

st within days.
Visibility dropped to a yard or two, prize cattle at the capital's annual Smithfield Farm Show fell dead, London's big red buses stopped running and performances of the opera "La Traviata" were abandoned because of poor vi-sibility inside Sadler's Wells

Appeal to Parliament

The 1952 death toll so shocked the British public that politicians and civil servants appealed to parliament for re-lief. The Clean Air Act was passed in 1956, empowering municipal councils in London and around Britain to order "smoke control areas" where hearths and in factories was

The job of converting to the use of gas, electricity, oil and other smokeless fuels took about six years and cost the government millions of dollars. Now practically all of London is smoke controlled.

The smoke control regulations have given a big boost to plant and bird life in the British capital. The parks department, for example, is starting to plant more cak trees in Hyde Park this year. Oaks cannot survive polluted air and almost disappear-.

from London during the

the mysterious backdrop in industrial revolution last century because of the smoke and factory fumes. Only 12 oak trees remain alive in Hyde Park.

More cake

"But we now find that oaks are much more amenable to the London atmosphere and we shall be planting more of them," said Robert Stevenson, superintendent of London's Central Royal Parks,

The London Natural History Society says new birds ive arrived in London since 1970, including grey wagtails, kestrels and pied flycatchers. Insects also are thriving in the cleaner air.

The London weather centre reports that in 1955 there were 35 days when visibility dropped below 500 metres. Now there are only nine days a year.

Some nostalgia buffs even regret the passing of the pea-soupers which were as much a feature of London as Buckingham Palace, They inspired romantic songs like "A foggy

day in London town." In 1961 two enterprising young Pennsylvania women, bottled it and said they sold 7,000 in the United States for 30 cents apiece.

While pea-soupers are only a recent memory, the fight against air pollution in London goes on.

As in most large Western cities, the battle now is against the growing menace of automobile, truck and bus fumes, according to Dr. Michael Schwar, head of Air Pollution Control for the Greater

London Council. "Millions of tons of pollution are pushed into the air by the London traffic each vear," Dr. Schwar said. The smog's main ingredients are carbon monoxide, lead and exides of nitrogen,

kidnappers Bracht's ANTWERP, April 11 (R). accent. The public prosecutor said he believed the gang had Belgian police today renewed demanded a ransom of bettheir efforts to track down the ween \$1.6 million and just over kidnappers of millionaire businessman Charles Bracht, who-

> som broke down when the kidnappers falled to provide the baron's family with proof that he was still alive. The public prosecutor, spe-

aking at a press conference here yesterday, refused to give any details of how the investigation into the kidnapping was going A high-powered crisis team set up to organise the search had imposed a tight news blackout on the effort.

The prosecutor said there appeared to be no political motive behind the kidnapping, and added that no links had been found with the recent abduction of another Belgian Baron, Edouard-Jean Empain, who was freed last month after two months' captivity.

Baron Bracht, one of the wealthiest businessmen in this thriving port city, made his fortune through commodity, banking insurance, and property companies. He was given his title in 1967 for services to industry and was Austria's honorary consul-general here.

## OORED BY CHARLES H. GOREN

AND OMAR SHARIF © 1978 by Chicago Tribune

Q.1-Neither vulnerable, as South you hold: +AKQ8 ♥AK76 ♦K9 +QJ3 The bidding has proceeded: South West North East 2 NT Pass 4 ♥ Pass

What action do you take?

Q.2-Both vulnerable, as South you hold: **◆J1072** ♥84 ♦ Q107 **◆KQ82** The bidding has proceeded: North East South West 1 ♦ 2 ♦ 2 **♦** Pass 3 7 Pass 3 ↑ Pass 4 Pass ?

Q.3-North-South vulnerable, as South you hold: ♦7 7KJ9652 0K853 ♣94 Partner opens the bidding with one no trump. What do you respond?

Q.4-Both vulnerable, as South you hold: **QJ7** ♥85 ♦KQ10 **AQ1095** 

Greek, Turkish talks are

arms

postponed

ces and the illicit opening of ATHENS, April 11 (R). -Greek-Turkish talks on issues Mr. Gray, 61, was appointdividing the two countries, ined to the top FBI job by forcluding Cyprus and territorial mer President Richard Nixon rights in the Aegean Sea, have in 1972 after the death of the been postponed for the time being, a Greek government sp-He resigned in disgrace a okesman said today.

diplomatic channels in the near

Athens said the postponement was made inevitable by recent

events, particularly the United

States administration's anno-

unced intention a week ago to ask Congress to lift the Ameri-

can arms embargo against Tur-

key.
The atmosphere was not con-

ducive for such talks, the sour-

originally agreed by Prime Ministers Constantine Karaman-

lis of Greece and Bulent Ecevit of Turkey at a meeting last month in Montreux, Switzer-

The main issue of the talks

was to have been air space rights over the Aegean and cl-

aims to its continental shelf.
Mr. Byron Theodoropoulos,
Secretary General of the Greek
Foreign Ministry, had been due

to leave for Ankara on Thurs-

day to head the Greek delega-

Mr. Sukru Elekdag, General Secretary of the Turkish Fore-

ign Ministry, was to have head-ed the Turkish delegation,

Turkey had also been linked

policy had further complicated the problem instead of helping

Mr. Karamanlis said U.S.

The U.S. arms embargo

with the Cyprus issue.

solve it.

tion in the talks.

The postponed talks were

An authoritative source in

little more than a year later The spokesman gave no re-ason for putting off the expert-level talks, which were due to when it was disclosed that, at the urging of White House aides, he burned documents open for three days in Ankara that could have been used as evidence in investigations Into on Friday. He said only that a new date would be fixed through

ce said.

Attorney General Griffin Bell, announcing yesterday's indictments, said disciplinary proceedings would be taken against 68 FBI agents, most of them attached to the New York Field Office, one former agent, and one Justice Department lawver.

with conspiring a deprive re-

latives and friends of the

Weathermen of their civil ri-

ghts by approving secret sea-

rches of their homes and offi-

legendary J. Edgar Hoover.

the Watergate scandal.

Among the agents to be disciplined is Wallace La Pra-Assistant FBI Director. who now heads the bureau's New York Field Office.

# Arab Red Crescent, Red Cross conference opens

Belgian police renew

efforts to track down

RABAT, April 11 (R). — The tenth regional conference of Arab Red Cross and Red Crescent Associations was opened by Princess Lalla Malika, sister of King Hassan Two, here yesterday with nineteen Arab states represented plus the Palestine Liberation Orga-

In an opening address the princess called for increased contributions for the relief of refugees in south Lebanon and

se body was found early terday on a rubbish dump

An autopsy showed that Ba-ron Bracht had died violently

during or shortly after he was dragged from his car in a base-ment car park in Antwerp's business district on March 7,

indicating that ransom dem-ands had been made after his

A telephone call telling the

baron's son Theo where to find

a note which led police to the

dump came one day after Theo had appealed to the kid-

nappers on television to break

their three-week silence and

He said that one of the kid-

nappers, whom he referred to as "D", had phoned him ear-

lier, speaking English with an

Cyprus police

arrest more

"conspirators"

NICOSIA, April 11 (R). — Police have arrested three more

people, including an officer in

the Greek Cypriot National

Guard, alleged to be connected with a seditious conspiracy

against the Republic of Cyp-

nisation announced the arrest

of Captain Charalambous Pa-

pacleovoulou, bringing to 21 the number of people in police

custody in connection with the

night are also members of the

national guard, but not officers.

Their names were given as

George Lazoupieri and Anto-

arrested over the past 10 days

is Vassos over the past 10 days

ed "the doctor" because he stu-

died medicine in his youth, who

is alleged to have mastermind-

ed the kidnapping of President Sypros Kyprianou's 21-year-old

Captain Papacleovoulou at that time handed over to the authorities a tape recording of

young Kyprianou's voice, set-

ting out his kidnappers' dem-ands for the release and am-

nesty of all prisoners belonging

to the EOKA-B organisation, wanting union of Cyprus with

son last December.

Among the 18 other people

Two other men arrested last

affair,

nios Kyriacou.

The state broadcasting orga-

rus, Cyprus Radio said today.

near here.

death.

contact him.

me for assistance to Palestinian and other Arab refugees in the Middle East.

During the four-day conference delegates will also discuss plans to stimulate greater youth participation in Red Cross and Red Crescent activities, and the creation of new associations in countries like Qatar, Oman and the United Arab Emirates.

It will also consider a proposal to make Arabic one of the international Red Cross's

## Urban querrilla trial in Berlin is adjourned

WEST BERLIN, April 11 (R). The trial of six urban guerrillas charged with kidnapping dering a judge was adjourned shortly after it opened here today after defence lawyers objected to the scale of security measures surrounding the pro-

Defence counsel argued that the security precautions reduc-ed their clients' chances of getting a fair hearing. After an initial session of on-

ly 40 minutes, the presiding judge ordered a recess for the defence objections to be considered. The court building here has

been turned into a virtual fortress at a cost of about four million marks (\$2 million). Security precautions include bullet-proof glass partitions and special cabins for searching the public.
The six defendants are char-

ged with abducting Peter Lorenz leader of the Christian Democratic Party (CDU) in West Berlin, in February 1975, and shooting the city's Chief Judge, Guenter von Drenkmann, in No-

What do you bid now?

The bidding has proceeded:

South West North East 1 ↑ Pass 1 ↑ Pass 2 ↑ Pass 3 ↑ Pass

What action do you take?

Q.5-Neither vulnerable, as South you hold: **♦KQ8** ♥Q873 ♦K96 **♦**752 Partner opens the bidding with one heart. What do you respond?

Q.6—Neither vulnerable, as South you hold: **♦K863 ♥QJ7 ♦954 ♣K107** The bidding has proceeded: West North East South 1 4 2 ♥ 2 4 ? What action do you take?

Q.7-Neither vulnerable, as South you hold: ♥KJ95 ◇AKJ83 ◆K1072 The bidding has proceeded: South West North East 1 ♦ 1 • 1NT Pass

What do you bid now?

Q.8-Both vulnerable, as South you hold: **+Q86** ♥KQ93 ♦K97 **+**A103 Partner opens the bidding with one club. What do you respond?

Par time 30 minutes

## Killer satellite talks announced Vance defends Carter's

WASHINGTON, April 11 (R). — Secretary of State Cyres Vance has strongly defended the Carter administration's arms control policies and amounced new talks with Moscow to baltesting "hunter-killer" satellites

control policies

In a speech before a national conference of newspaper ed. tors here yesterday, Mr. Vance set the stage for his critical talks in Moscow at the end of next week on a strategic arms limits.

"We are engaged today in a broader range of arms control negotiations than ever before in our history, because the opportunities we can grasp, and the challenges we face, are greater than ever before," Mr. Vance said.

Mr. Vance practically equated arms control with a strong defence, saying both were essential steps to achieving national The effort to slow the arms race through mutual and balance

ed restraints had been a central element in U.S. policy under seven presidents, Democratic and Republican, he added State Department officials said Mr. Vance's speech was alm ed at countering domestic criticism that the administration was focussing on arms control at the expense of adequate defence. It also attempted to counter-balance a speech by President Carter last month in North Carolina which was sharply criticised in Moscow for its tough tone and stress on defence and

not arms control "There are clear limits to what we should expect from arms control. But it is equally clear that arms control, pursued in a deliberate and measured way, will contribute significantly to reducing the prospect of war," Mr. Vance said.
"This is why I believe so strongly that our security is best

protected by policies of strength in our national deferce and by practical arms control agreements that limit the dangers to which we must, and always will, respond."

Mr. Vance announced talks would open next month on treaty to halt tests of the hunter-killer space satellites, which the Soviet Union has been working on for over a decade.

Answering questions, the secretary of state also defended President Carter's decision to postpone developing the neutron bomb, which has stirred controversy because of its power to kill people and leave buildings intact.

Asked whether the weapon might be a bargaining point in negotiations, he said the United States would like the Soviet Bloc to agree to reduce tank forces in the area and perhaps

The kinds of things that we would be looking for are the kind of things that affect the security of the European region Such things as tank forces in the area, the threat to the area which arises from weapons such as the SS-20 ballistic missile and other items which it is too early yet to delineate."

He said the subject would be discussed with U.S. allies.

## U.N. investigation of Iranian riots sought

VIENNA, April 11 (R). — Some 135 protesters today petitioned U.N. Secretary General Kurt Waldheim to send a special commission to investigate recent rioting in Iran. In a signed letter addressed to Mr. Waldheim, the petition-

ers said more than 500 people

had been killed during clashe between Iranian police and anti-government demonstrators in the last five months. Among the signatories, most of them Austrian journalists was Dr. Eva Kreisky, daughterin-law of Austrian Chancellor

JUMBLE THAT SCRAMBLED WORD GAME by Henri Arnold and Bob Lee Unscramble these four Jumbles, one letter to each square, to form Oh, you are, are you?! CIHRB HUCET **GARCHE** YOU WOULDN'T EXPECT TO BE LEFT IN THIS POSITION WHEN YOU'RE THIS. REFUGI Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon. Print answer here: (Answers tomorrow) Jumbles: CRACK IRATE KETTLE PARADE Answer: What a stockbroker relied on to mend his broken heart-"TICKER" TAPE





36. Sphere 37. Search diligently 40. It is so 42. Wire mea surement 44. Seaweed 45. Eyeworm 45. Hooter 4/5

